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EXAMINER

TRUONG, LECHI

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2126

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/737,927

Applicant(s)

PENG, LUOSHENG

Examiner

LeChi Truong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. Claims 1-52 are presented for the examination.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims ~~18, 44, 47, 49~~²⁷⁻⁵¹ are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. The following terms lack proper antecedent basis:

- (i) the said physical sessions – claims 18, 44 and 49;
- (ii) said mobile device – claim 47;

B. The claim language in the following claims is not clearly understood:

- (i) As to claims 1, 27, they are not clearly to define what the relationships are between user and application registration and a list of frequently accessed information or user operation history. These relationships have not been clearly defined. What is the functional of user and application registration information?
- (ii) As to claims 18 and 44, they are not clearly indicated what is different between not located and not current.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-11 and 27-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rowley (US. Patent 5,999,740) in view of Byrne et al (US. Patent 6,539,382 B1) and further in view of Admitted Prior Art (APA).

4. As to claim 1, Rowley teaches the invention substantially as claimed including: a least one user (the client computer, col 5, ln 42-67/client, col 3, ln 10-67), user and application registration information (stores a registration file 109 containing a list of all the applications currently installed on the client, col 3, ln 10-67). Rowley does not explicit teach user operation history from at least one user, a list if frequently accessed information based on said user operation history, caching information at a mobile device. However, Byrne teaches user operation history from at least one user (capture information about a user's data access history, col 5, ln 31-35), a list if frequently accessed information based on said user operation history (uses such information to calculate when entries should be pre-fetch... for example recommended pre-fetching time, a filter key for the pre-fetch, and a cache replacement policy, col 5, ln 45-52 and abstract line 6-11), selectively caching information at a mobile device (a cache replacement policy may replace the least recently used cached entries, col 5, ln 49-55).

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5. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Rowley and Byrne because Byrne's user operation history from at least one user, a list of frequently accessed information based on said user operation history, caching information at a mobile device would provide a performance with high effort required to update and maintain a cache.

6. Rowley and Byrne do not explicitly teach gateways. However, APA teaches gateways (gateways, page 2, ln 14).

7. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Rowley, Byrne and APA because APA's gateways would provide the connection for communication between mobile devices and servers.

8. **As to claim 2**, Rowley teaches a first set and second set of frequently accessed information (the manifest file, col 5, ln 42-67 /col 6, ln 1-20 and col 8, ln 20-35).

9. **As to claim 3**, Rowley teaches a broadcast about a new version (download from said server computer to said client computer a manifest file containing the details of the application files to form an updated version of the selected application, col 8, ln 15-40), old version (the existing file, col 6, ln 1-21/ files, col 6, ln 1-21), new version (the file version is more advanced, col 6, ln 1-21), comparing new version and old version (existing files with the same names, col 6, ln 1-21), updating porting of said information(the directory will be overwritten, col 6, ln 1-21/ the application files required to form an updated version, col 8, ln 20-35/ application is selected for upgrading, col 7, ln 50-60), user event(update program, col 7, ln 50-67).

10. **As to claim 4**, Rowley teaches a user request (the uploaded, col 4, ln 7-65), old version (the existing application, col 4, ln 7-65).

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11. **As to claim 5**, Rowley teaches a status check with a server (the administrator to specify which of the server 102 is to act as a source server, col 3, ln 45-67), a new version (a new manifest file, col 8, ln 45-67/ the file version is more advanced, col 6, ln 1-21), old version (the existing file, col 6, ln 1-21/ files, col 6, ln 1-21).
12. **As to claim 6**, Rowley teaches triggering said status check (selecting the OK button, col 4, ln 40-67).
13. **As to claim 7**, Rowley teaches an estimated update interval (select target server, col 4, ln 40-67).
14. **As to claim 8**, it is apparatus claim of claim 3; therefore; it is rejected for the same reason as claim 3 above.
15. **As to claim 9**, it is an apparatus claim of claim 8; therefore, it is rejected for the same reason as claim 8 above. In additional, Rowley teaches if said local cache includes said old version or local caches does not include said old version (identify which of the currently installed applications have more recent versions available, col 5, ln 28-67/ a check is made to determine, col 6, ln 1-60).
16. **As to claim 10**, Rowley teaches downloading (a download ... a manifest file, col 9, ln 1-15), a schedule (details of the application files required to form an updated version of the selected application, col 9, ln 1-25).
17. **As to claim 11**, Rowley teaches an estimated update interval (the content of the manifest file, col 4, ln 46-67/ Fig.8).
18. **As to claims 27-37**, they are apparatus claims of claims 1-11; therefore, they are rejected for the same reasons as claims 1-11 above.

19. Claims **12 and 38** are rejected under 35 U.S.C. 103(a) as being unpatentable over Rowley (US. Patent 5,999,740) in view of Byrne et al (US. Patent 6,539,382 B1) in view of Admitted Prior Art (APA) and further in view of Grant et al (US. Patent 5,218,602).

20. As to **claim 12**, Rowley, Byrne and APA do not teach a synchronization process, response. However, Grant teaches a synchronization process, response (a synchronization signal, col 18, ln 15-30/ access, col 18, ln 15-30).

21. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Rowley, Byrne, APA and Grant because Grant's a synchronization signal would improves the method of using a switching network to handle a large number of messages in a given time.

22. As to **claim 38**, it is an apparatus claim of claim 12; therefore, it is rejected for the same reason as claim 12 above.

23. Claims **13, 14, 39 and 40** are rejected under 35 U.S.C. 103(a) as being unpatentable over Rowley (US. Patent 5,999,740) in view of Byrne et al (US. Patent 6,539,382 B1) in view of Admitted Prior Art (APA) and further in view of Ogle et al (US. Patent 5,983,281).

24. As to **claim 13**, Rowley, Byrne and APA do not teach activity at said mobile device and said gateway, routing said mobile device, gateway is overload. However, Ogle teaches activity at said mobile device and said gateway, routing said mobile device, gateway is overload (gateway

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20 receives a message from a source device, col 7, ln 62-67 to col 6, ln 1-45/ redirect communication to the proper gateway col 6, ln 1-45/ if the gateway was not the proper gateway, col 6, ln 1-45).

25. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Rowley, Byrne, APA and Ogle because Ogle's activity at said mobile device and said gateway, routing said mobile device, gateway is overload would provide the load balancing between gateways interconnecting two computer networks.

26. As to claim 14, Ogle teaches nearest function gateway (the proper gateway, col 6, ln 1-45).

27. As to claims 39 -40, they are apparatus claims of claimS 13-14; therefore, they are rejected for the same reasons as claims 13-14 above.

28. Claims 15, 16, 41 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rowley (US. Patent 5,999,740) in view of Byrne et al (US. Patent 6,539,382 B1) in view of Admitted Prior Art (APA) and further in view of Ratcliff et al (US. Patent 6,023,734).

29. As to claim 15, Rowley, Byrne and APA do not teach saving local information and a list of uniform resource locator in database of gateway, new mobile device, an initiation request, and new mobile device. However, Ratcliff teaches saving local information and a list of uniform resource locator in database of gateway, new mobile device, an initiation request, and new mobile device (the addresses and all other information pertaining to all the connected initiating, col 3, ln 10-10/ col 4, ln 60- 67 to col 5, ln 1-13/ col 25, ln 35-55/ a port-sharing table, col 3, ln

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10-10/ col 4, ln 60- 67 to col 5, ln 1-13/ col 25, ln 35-55/ host A, the initiating host, col 3, ln 10-10/ col 4, ln 60- 67 to col 5, ln 1-13/ request , col 25, ln 35-55).

30. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching Rowley, Byrne, APA and Ratcliff because Ratcliff's the addresses and all other information pertaining to all the connected initiating, a port-sharing table in order, host A/ the initiating host would set up the desired communication directly between the two hosts without any need to route the communication or data through the local area network.

31. **As to claim 16**, Rowley teaches downloading / sending said application or data from a server (download from said remote file server to said computer a manifest file, col 9, ln 5-15).

Note claim 1 for local cache/cache.

32. **As to claims 41-42**, they are apparatus claims of claims 15-16; they are rejected for the same reasons as claims 15-16 above.

33. **Claims 17 and 43 are** rejected under 35 U.S.C. 103(a) as being unpatentable over Rowley (US. Patent 5,999,740) in view of Byrne et al (US. Patent 6,539,382 B1), in view of Admitted Prior Art (APA) and further in view Sciammarella et al (US. Patent 5,886,698).

34. **As to claim 17**, Rowley, Byrne and APA do not teach a request to search, keyword, generating a result based on searching. However, Sciammarella teaches search, keyword, generating a result based on searching (response to search, predetermined keyword, search result, col 8, ln 1-15).

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35. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Rowley, Byrne, APA and Sciammarelle because Sciammarelle's response to search, predetermined keyword, search result would provide a graphical to indicate the searched results.

36. **As to claim 43**, it is an apparatus claim of claim 17; therefore, it is rejected for the same reason as claim 17 above.

37. Claims **18, 20, 44, 46** are rejected under 35 U.S.C. 103(a) as being unpatentable over McGuire et al (US. 6,493,871 B1) in view Doi et al (US. Patent 6,389,422 B1).

38. **As to claim 18**, McGuire teaches a requested application (the files are required for installing the revised software product, col 7, ln 31-32/ CHKNTF-S. EXE, col 10, ln 1-50), request application is current (the most-recent version, col 10, ln 1-50), an update schedule (the setup program determines which files is need to add to or update the existing files to provide the set of installation files, col 8, ln 8-10/an initial setup package 80 which includes a setup program 82 and information 84 regarding which files are potentially required for installing, col 7, ln 23-45/ Fig. 2/ initial setup package 102, col 8, ln 5-25), determining whether an update schedule is executed (col 8, ln 7-10), generating an application download request (the list of needed files is included in a download request 90, col 7, ln 42-45), generating an application update request (update request 100, col 8, ln 7-10/it is therefore included in the needed files list, col 10, ln 5-50), generating a application status check request if said update schedule is not executed(col 7, ln 60-64/ return new version of that file after or before a set put program is execute, col 7, ln 50- 55

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and col 12, ln 26-30/ a hash number is generated by applying to it a hash function/ the file hashing, col 9, ln 9-38/ if the download server sending incorrect data, the receiver would be aware of this by checking the hash value of the download files, col 14, ln 30-41), sending application download request, said application update request, or said application status check request (col 7, ln 35-55/ col 8, ln 9-10).

39. McGuire does not teach opening a logical session, a physical session connected to a gateway, a logical caches. However, Doi teaches opening a logical session, a physical session connected to a gateway (a logical network 112, col 2, ln 1-67/ Fig. 36), logical cache (a cache 374, col 2, ln 1-50).

40. It would have been obvious to one of the ordinary skill in the art at the time invention was made to combine the teaching of McGuire and Doi because Doi's a logical network, a cache would allow the user to successively access pieces of information consisting of file object held and provide transparent interconnection of these single networking protocols.

41. **As to claim 20**, McGuire teaches loading said requested application from said local caches (transmitting a download request containing the needed-files list to a download server, col 15, ln 65-67); update schedule is executed (processing the download files to update the existing files, col 16, ln 6-11).

42. **As to claims 44 and 46**, they are apparatus claims of claims 18 and 20; therefore, they are rejected for the same reasons as claims 18 and 20 above.

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43. Claims **19 and 45** are rejected under 35 U.S.C. 103(a) as being unpatentable over McGuire et al (US. 6,493,871 B1) in view Doi et al (US. Patent 6,389,422 B1) and further in view of Byrne et al (US. Patent 6,539,382 B1).

44. As to **claim 19**, McGuire teaches a user database (the \Windows\system32 directory, col 10, ln 4-15).

45. McGuire and Doi do not teach user operation history. However, Byrne teaches user operation history (capture information about a user's data access history, col 5, ln 31-35).

46. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of McGuire, Doi and Byrne because Byrne's user operation history from at least one user would provides a performance with high effort required to update and maintain a cache.

47. As to **claim 45**, it is an apparatus claim of claim 19; therefore, it is rejected for the same reason as claim 19 above.

48. Claims **21-25** and **47-51** are rejected under 35 U.S.C. 103(a) as being unpatentable over McGuire et al (US. 6,493,871 B1) in view of Byrne et al (US. Patent 6,539,382 B1).

49. As to **claim 21**, McGuire teaches a request (a download request, col 7, ln 7-55), parsing (compiles a needs files list in a download request, col 7, ln 7-55), first intelligent strategy (the set of installation files, col 7, ln 7-55), database access request (the list of needed files is included in a download request 90, col 7, ln 25-55), accessing a database (database of update data 92, col 7,

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ln 25-55), response (update files 96, col 7, ln 25-56), mobile device (the client 72, col 7, ln 25-55).

50. McGuire does not teach user operation history. However, Byrne teaches user operation history (capture information about a user's data access history, col 5, ln 31-35).

51. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of McGuire and Byrne because Byrne's user operation history from at least one user would provide a performance with high effort required to update and maintain a cache.

52. As to **claim 22**, McGuire teaches determining a requested application or data is located (to determine whether the desired version of CHKNTF-S.EXE exists, col 10, ln 4-20), requested application or data is current (the most-recent version, col 10, ln 4-37).

53. As to **claim 23**, McGuire teaches a server (server 70, col 7, ln 25-55), a server response (update files 96, col 7, ln 25-55/ a list of the files, col 13, ln 25-67/ an error, col 13, ln 5-12/ an incomplete response), a second intelligence strategy (constituent parts, col 13, ln 58-67).

54. As to **claim 24**, McGuire teaches a logical session, physical session (the transfer protocol requirement, col 11, ln 10-25). Protocol must be opened before the data is transferred.

55. As to **claim 25**, McGuire teaches broadcast message (an error, col 13, ln 5-12/ an incomplete response, col 14, ln 42-55), an acknowledgment (the list will be re-submitted, col 14, ln 30-55).

56. As to **claims 47-51**, they are apparatus claims of claims 22-25; therefore, they are rejected for the same reasons as claims 21-25 above.

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57. Claims **26, 52** are rejected under 35 U.S.C. 103(a) as being unpatentable over McGuire et al (US. 6,493,871 B1).

58. **As to claim 26**, McGuire teaches a schedule for updating / broadcast message (an initial setup package 80, col 7, ln 24-67), schedule (setup program and file information in the setup package 80, Fig. 20) application (information 84 regarding which files are potentially required for installation, col 7, ln 10-55 / the list of need files, col 7, ln 15-56), updated application (the set of installation files, col 7, ln 25-56), a request (a download request, col 7, ln 10-55), a differential file (update file 96, col 7, ln 25-56/ need files list, col 7, ln 25-55), update said application(update the existing files, col 7, ln 25-55). McGuire does not explicit teach comparing. However, McGuire teaches comparing (scanning, col 7, ln 32-40). It would have been obvious to one of the ordinary skill in the art at the time the invention was made to apply the teaching of McGuire because McGuire's scanning would determines which files are needed to add or update the existing files to provide the set of installation files.

59. **As to claim 52**, it is an apparatus claim of claim 26; therefore, it is rejected for the same reason as claim 26 above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LeChi Truong whose telephone number is (571) 272 3767. The examiner can normally be reached on 8 - 5.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIP. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIP system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

LeChi Truong

October 13, 2004


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